

Use for newly proposed research						
Study Nickname:	Exploring Teacher Dialogue					
Study Title:	Exploring Teacher Dialogue: An Inhibiting Exercise or a Beneficial Practice to Improve Instruction in Secondary Professional Learning Communities					
Principal Investigator:	Jack Schneider					
PI Department:	College of Education					
Date of CITI Training:	12/27/2021	Degrees	PhD	Involved in Consent?	NO	Financial interest related to the research?
						Yes* No X
Email Address:	Jack_schneider@uml.edu			Phone #:	978-401-6676	Cell:
Additional Contact:				Phone #:		Cell:
Check here if you wish to be added to the UML IRB Listserv: Check here if you wish to add all personnel to the UML IRB Listserv:						

Names of all UML Personnel involved in the design, conduct, or reporting of the research					
Date of CITI Training	Name & Email Address	Degrees	Role in the research	Involved in consent?	Financial interest related to the research?
12/27/2021	Maggie Moriarty Maggie_moriarty@student.uml.edu	MEd	Research Assistant	X	Yes No X
					Yes No
					Yes No
					Yes No
					Yes No
					Yes No
					Yes No
					Yes No
					Yes No

- “Immediate Family” means spouse, domestic partner, children, parents, spouse’s parents, and dependents.
- “Financial Interest Related to the Research” means any of the following interests in the **sponsor, product or service being tested, or competitor of the sponsor** held by the individual or the individual’s immediate family as defined above:

<ul style="list-style-type: none"> ○ Ownership interest of any value including, but not limited to stocks and options, exclusive of interests in publicly-traded, diversified mutual funds. ○ Compensation of any amount including, but not limited to honoraria, consultant fees, royalties, or other income. ○ Proprietary interest of any value including, but not limited to patents, trademarks, copyrights, and licensing agreements. ○ Board or executive relationship, regardless of compensation. 	
*If yes, you must complete the disclosure process by contacting Disclosures@uml.edu	
Funding Sources	
Name of Funding Source	Grant Identifier
None	

Additional Information	
UML Location(s) where subjects/participants will be seen.	None
Additional Departments involved in the study.	None
Key Words	PLC Lite, Professional Learning Communities, organizational learning, teacher professional development, teacher dialogue
Is this research required to be registered on ClinicalTrials.gov?	Yes No X
<p>Consumer/Lay Summary of Study – limit to 3 succinct sentences/300 characters: Scholars have illustrated that effective Professional Learning Communities (PLCs) have increased student achievement and advanced teacher pedagogy (Talbert, 2010; Stol, Bolam, McMahon, Wallace, & Thomas, 2006; Brown, Horn & King, 2018; DuFour & Reeves, 2018; Rosenholtz, 1989). Yet less is known about the mechanisms by which PLCs transform teacher pedagogical practice (Nelson, 2009). Hord (1997) noted dialogue as the most important mechanism teachers can utilize within learning organizations “in which staff conduct conversations about students and teaching and learning” (p 20). Dialogue has been found as a “central mediating practice” to help teachers adjust instruction beyond surface level changes (Marsh, Bertrand & Huguet, 2015). This study aims to further explore the process of teacher dialogue within PLCs to understand factors that inhibit, or support, the professional development of teachers.</p>	

Investigator Acknowledgment

The following check boxes must be checked before sending:

By checking below you are verifying that:

- **Yes** You have obtained the financial interest status ("Yes" or "No") for each member of the research staff.
- **Yes** You have obtained the agreement of each research staff to his/her role in the research.
- **Yes** You have obtained the agreement, if applicable, of any other department (outside of your own department) being asked to serve as a recruitment or study conduct site.
- **Yes X** You will conduct this Human Research in accordance with requirements in the INVESTIGATOR MANUAL (HRP-103).
- **Yes X** You have received appropriate approvals from your department chair or supervisor and it has been determined that all departmental requirements are met and that the investigator has adequate resources to conduct this Human Research in terms of time, facilities, staff, access to a subject population, and resources for care that subjects may need.

X By checking here, I attest that the information provided in this form is accurate.

Date: 12/27/21

Submit all documents to IRB@uml.edu

- FORM: Application for Initial Review (HRP-200), including as applicable:
 - Appendix A: External Site Approvals
 - Appendix B: Drugs and Device (include associated attachments, such as package insert, investigator brochure, or labeling, verification of IND/ IDE number)*
- Investigator Study Plan (See TEMPLATE (HRP-504) for instructions)
- All information intended to be seen or heard by subjects, including: (Advertisements and recruitment materials and changes to advertisements and recruitment materials must be IRB approved before their use)
 - Evaluation instruments and surveys
 - Advertisements (printed, audio, and video)
 - Recruitment materials and scripts
 - Consent documents
 - If consent will not be documented in writing, a script of information to be provided orally to subjects
 - Foreign language versions of the above
- Complete sponsor protocol (if applicable)
- Grant application, if any
- DHHS protocol and DHHS-approved sample consent document, if any

Appendix A: External Sites Involved in the Research**Complete for each non-UML site where the investigator will oversee or conduct the research**

Site name:	Lowell High School		
Site PI name:	Maggie Moriarty		
Contact phone :	978-967-5501	Contact email:	Maggie_moriarty@student.uml.edu
Yes No X	Will the external site review the research?		
Yes No X	Will the external site rely on the UML IRB?		
Site name:	Marlborough High School		
Site PI name:	Maggie Moriarty		
Contact phone :	978-967-5501	Contact email:	Maggie_moriarty@student.uml.edu

Yes	No	X	Will the external site review the research?	
Yes	No	X	Will the external site rely on the UML IRB?	
Site name:			Worcester Public Schools (High School TBD following IRB approval)	
Site PI name:			Maggie Moriarty	
Contact phone :			978-967-5501	Contact email: Maggie_moriarty@student.uml.edu
Yes	No	X	Will the external site review the research?	
Yes	No	X	Will the external site rely on the UML IRB?	
Site name:				
Site PI name:				
Contact phone :				Contact email:
Yes	No		Will the external site review the research?	
Yes	No		Will the external site rely on the UML IRB?	
Site name:				
Site PI name:				
Contact phone :				Contact email:
Yes	No		Will the external site review the research?	
Yes	No		Will the external site rely on the UML IRB?	

This research will involve a 40-minute Zoom remote interview about your experience as a member of a Professional Learning Community (PLC). There may also be some demographic information collected. The primary risk to you would be that your identity could be released but I have taken steps to protect your identity. There are no direct benefits to you from participating.

Hello, my name is Maggie Moriarty from the Leadership in Education Doctoral Program at the University of Massachusetts Lowell, and I am conducting a research study titled Exploring Teacher Dialogue: An Inhibiting Exercise or a Beneficial Practice to Improve Instruction in Secondary Professional Learning Communities. The purpose of the research is to explore what teachers discuss during PLC meeting time and why. Additionally, this study hopes to identify teacher conversations that inhibit or support changes to instructional practice.

With your permission, I am asking you to participate in a Zoom interview and I will ask you questions about your experience collaborating with other teachers on your PLC and the overall focus of your dialogue during meetings. The interview will take approximately 40 minutes of your time. With your permission, the interview will be recorded using the Otter application and transcribed.

Your participation in this interview is completely voluntary. This means you do not have to participate if you don't want to and can stop the interview at any time and for any reason.

With any type of research participation there is the risk for stress or disclosure. The potential risks of this research are minimal to non-existent. I am taking the following measures to protect data security:

- All identifying information is removed and replaced with a study ID.
- I will store all electronic data on a password-protected, encrypted computer.
- I will keep your identifying information separate from your research data, but I will be able to link it to you. I will destroy this link after I finish collecting and analyzing the data.

You can skip any questions you don't want to answer or stop the interview at any time. You will not receive compensation or incentive for participating in this study. There are no direct benefits to you. However, I hope that the results of this study will help me to understand how the nature of teacher dialogue in PLCs inhibits or supports changes in instructional practice. There are no direct benefits to you from participating.

All information in this interview will be kept confidential, meaning that your name will not be used in any transcript created from the zoom recording. Transcripts and recordings will be kept in a password-protected computer and destroyed after 3 years. I will be collecting your name and email with your responses in case I need to contact you again for a follow-up question. However, your name will not be released in any results that may be published about the study.

If you have questions or concerns regarding this research, you can contact me at: mmoriarty@student.uml.edu. You may also contact my advisor Jack_Schneider@uml.edu or at 978-934-

4677. For questions about your rights as a participant, concerns or complaints contact the UMass Lowell Institutional Review Board at IRB@uml.edu or at 978-934-4134.

Agreement to Participate

I confirm I am volunteering freely to participate in this research project. I have read and fully understand the purpose of the research project and its risks and benefits. I have had the opportunity to read this document and discuss my concerns and questions. By providing an electronic signature, I consent to participate in this research.

Electronic Signature: _____ Date: _____

Study title: Exploring Teacher Dialogue: An Inhibiting Exercise or a Beneficial Practice to Improve Instruction in Secondary Professional Learning Communities.

Researchers: My name is Maggie Moriarty, and I am a PhD candidate in the Leadership of Education Program at The University of Massachusetts Lowell. The Associate Professor of Curriculum and Instruction, Jack Schneider, is the Principal Investigator of this study and will be reviewing and guiding all research decisions.

We're inviting you to participate in a research study. Participation is completely voluntary. If you agree to participate, you can always change your mind and withdraw. There are no negative consequences, whatever you decide.

What is the purpose of this study?

Scholars have illustrated that effective Professional Learning Communities (PLCs) have increased student achievement and advanced teacher pedagogy. Yet less is known about the mechanisms by which PLCs transform teacher pedagogical practice. This study will pursue two research questions:

1. What is teacher dialogue within Professional Learning Communities focused on and why?
2. How does the nature of teacher dialogue in Professional Learning Communities inhibit or support changes in instructional practice?

What will I do and how long will it take?

I will be observing one PLC meeting. I will not ask any questions during this meeting but I will be audio recording all dialogue. I will also collect any documents you use during your meeting time if you voluntarily allow me to do so. I will transcribe all recordings to use as collected data for this study. The recording is necessary for this study. If you do not want to be recorded you should not be in this study.

Could being in this research hurt me?

- You might feel uncomfortable being observed.
- There is the risk that you may feel as though you have to participate since it was your Principal who sent you the recruitment email. Your participation or non-participation will have no negative effects on your employment.
- There is a chance your participation in this research is disclosed, we are minimizing this risk in the following ways:
 - All identifying information is removed and replaced with a study ID.
 - I will store all electronic data on a password-protected, encrypted computer.
 - I will keep your identifying information separate from your research data, but I will be able to link it to you. I will destroy this link after I finish collecting and analyzing the data.

Will being in this research help me in any way? There are no direct benefits to you. However, I hope that the results of this study will help me to understand how the nature of teacher dialogue in PLCs inhibits or supports changes in instructional practice. There are no direct benefits to you from participating.

How many people will take part in this research? I will be conducting research across three different high schools. I will be observing 3 PLC teams in each high school, totaling 9 PLC teams. Following this observation, I will conduct interviews with two voluntary teachers from each PLC in order to obtain a deeper understanding of how teacher dialogue inhibits or supports changes to instructional practice. I will interview 18 voluntary teachers total.

Will it cost me any money to take part in this research? None

Will I receive any compensation or incentive for participating in this study? There is no compensation or incentive for participation in this study.

How will my information be stored and when will it be destroyed?

Your name will not be used in any transcript created from the observations. Transcripts and recordings will be kept in a password-protected computer and destroyed after 3 years. Your name will not be released in any results that may be published about the study. We will replace this information with a code number. We will create a master list linking your code number to your name. We will keep this list separate from your data.

- We will not use or share your data for any future research unrelated to this study, even if identifiers are removed.

Data will be stored on the researchers' encrypted, password protected computers, on the UML One Drive server. The data will be destroyed after three years.

Who can see my data?

- I will have access to identified coded names removed and labeled with a study ID. This is so I can analyze the data and conduct the study.
- The Institutional Review Board (IRB) at UML may review all the study data. This is to ensure we're following laws and ethical guidelines.
- I may share findings in publications or presentations. If I do, the results will not share individual results or identify participant names. If I quote you, I will use pseudonyms (fake names).

Contact information:

For questions about the research, complaints, or problems: Contact Maggie Moriarty, 978-967-5501 & mmoriarty@student.uml.edu

For questions about your rights as a research participant, complaints, or problems: Contact the UMass Lowell IRB (Institutional Review Board) at 978-934-4134 or at IRB@uml.edu

Agreement to Participate

I confirm I am volunteering freely to participate in this research project. I have read and fully understand the purpose of the research project and its risks and benefits. I have had the opportunity to read this document and discuss my concerns and questions. By providing an electronic signature, I consent to participate in this research.

Electronic Signature: _____ Date: _____

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OFFICE OF RESEARCH INTEGRITY
600 Suffolk St, Wannalancit Mills Suite 212
Lowell, MA 01854
T: 978-934-4134 F: 978-934-6012
<https://www.uml.edu/research/integrity/>

2/4/2022

Jack Schneider
College of Education
61 Wilder St
O'Leary Library 535
Lowell, MA 01854-
9789344677
Jack_Schneider@uml.edu

Dear Jack Schneider, PhD:

The IRB reviewed the following on 2/4/2022 and issued an Exempt determination for:

Type of review:	Initial
Title:	Exploring Teacher Dialogue: An Inhibiting Exercise or a Beneficial Practice to Improve Instruction in Secondary Professional Learning Communities
Principal investigator:	Jack Schneider, PhD
IRB number:	22-001
Level of Review:	Exempt 45 CFR 46.104(d)(2)(iii)
IND or IDE, if any:	N/A
Funding Source, if any:	N/A
Documents reviewed:	HRP-200, HRP-504, Interview consent, Observation Consent, Email for Participant Observation/Interview, Observation Protocol, Interview Questions

This research is reviewed under the 2018 regulations. It is neither FDA nor DOJ regulated.

Copies of any approved consent documents, consent scripts, or assent documents are attached.

In conducting this research, you are required to follow the requirements in "[HRP-070 Policy: Investigator Obligations](#)."



Sincerely,

Emily Sousa, MA, CIM, CIP
IRB Manager

INSTRUCTIONS:

- **Provide information once.** It's better to refer to earlier items (e.g., "See #...") than to repeat.
- **If an item does not apply, type "NA."**
- **Delete the instructions in the brackets as you answer each item.**
- **Use a version number or date in the file name.**

1. TITLE

Exploring Teacher Dialogue: An Inhibiting Exercise or a Beneficial Practice to Improve Instruction in Secondary Professional Learning Communities

2. EXTERNAL IRB REVIEW HISTORY*

N/A

3. PRIOR APPROVALS:

N/A

CONFLICT OF INTEREST (COI):

N/A

BIOHAZARDOUS AGENTS:

N/A

RADIATION:

N/A

4. BACKGROUND*

Scholars have illustrated that effective Professional Learning Communities (PLCs) have increased student achievement and advanced teacher pedagogy (Talbert, 2010; Stol, Bolam, McMahon, Wallace, & Thomas, 2006; Brown, Horn & King, 2018; DuFour & Reeves, 2018; Rosenholtz, 1989). Yet less is known about the mechanisms by which PLCs transform teacher pedagogical practice (Nelson, 2009). Hord (1997) noted dialogue as the most important mechanism teachers can utilize within learning organizations “in which staff conduct conversations about students and teaching and learning” (p 20). Dialogue has been found as a “central mediating practice” to help teachers adjust instruction beyond surface level changes (Marsh, Bertrand & Huguet, 2015). This study aims to further explore the process of teacher dialogue within PLCs to understand factors that inhibit, or support, the professional development of teachers.

In order to understand the purpose, development, and practice of teacher dialogue within PLCs, I will examine how teachers facilitate dialogue during collaboration in three secondary intuitions. This study will pursue two research questions:

1. What is teacher dialogue within Professional Learning Communities focused on and why?
2. How does the nature of teacher dialogue in Professional Learning Communities inhibit or support changes in instructional practice?

5. OBJECTIVES*

This qualitative research approach will involve a four-month comparative case study of three secondary high schools in three different districts in Massachusetts. Each of the three high schools will be at different developing stages of PLC implementation. The goal of this study is to obtain one site that is a well-developed, high-functioning PLC community, while the other two sites would be newly developed PLC institutions. This study will draw on data from PLC meeting observations, teacher interviews, and collected document analysis. I will conduct observations of 3 separate PLCs (9 observations total) at each school as selected by the principal. Following observations, I will randomly recruit a minimum of 2 teachers to interview from each PLC at all sites (minimum 18 interviews total). I will utilize organizational learning theory to frame semi-structured interview questions. I will take a directed approach to content analysis directed by the five disciplines of organizational learning theory (systems thinking, team learning, mental models, personal mastery, and shared vision) as guidance for axial codes. Utilizing content analysis to analyze language used in observations, interviews and collected documents between sites will allow me to provide knowledge and understanding of the phenomenon of teacher dialogue within PLCs. Once all interviews and observations are transcribed, I will use a three-pronged approach to line-by-line coding, beginning with an initial open coding schema. After the initial open coding approach, I will refine codes using an axial coding method derived from the five disciplines of organizational learning theory as mentioned previously. I will then frame axial codes through selective coding by chunking thematic responses of each individual participants together through constant comparison. Finally, I will utilize Labov's (1972) narrative elements to structure the participant's stories to better understand the phenomenon of events, reactions, perspectives, and how they are portrayed (Gibbs, 2007). To account for implications of my second research question, I plan to design an interview protocol that addresses how my participants believe teacher dialogue within PLC collaboration has inhibited or supported changes in their instructional practice. Two exemplar questions that I will include in my interview protocol are:

1. Can you give greater detail of your current experience participating in dialogue with the members of your PLC during a process of team learning as opposed to resolving concerns and planning in isolation?
2. Can you provide a specific example of a time when you changed your approach to instruction as a result of collaboration with your PLC?

6. STUDY OUTCOMES*

Researchers in the field suggest further exploration of strategies adopted to improve teacher practice and increase trust within learning communities in order to enhance school improvement efforts (Hallam, Smith, Hite, Hite & Wilcox, 2015). For teachers to understand their own conceptions, beliefs and assumptions of instruction, development cannot occur in isolated classrooms. Rather, teachers must have the opportunity to recontextualize and understand their own thinking as guided by research with their colleagues in practice (Ball, 2000). By comparing

three high schools at different developing stages of PLC implementation, the results from this case study may highlight a more coherent approach to strategies designed to increase productivity in teacher dialogue for all communities. This case study aims to address the gap between theory and practice in observing how teacher dialogue influences the fidelity of PLC implementation in secondary institutions.

7. INCLUSION AND EXCLUSION CRITERIA*

This qualitative study will only include adult teachers. Upon IRB approval I can fill out the appropriate paperwork for each of the three school districts to conduct research at their institution. All interviews will be conducted over Zoom. All observations will be audio-recorded in person. All voluntary participants will receive consent forms that explain the possible risk of joining the study two weeks prior to the observations and interviews to ensure sufficient time to decide whether to participate.

8. VULNERABLE POPULATIONS*

N/A

9. SETTING

This study will draw on data from PLC meeting observations, teacher interviews, and collected document analysis. I will conduct observations of 3 separate PLCs (9 observations total) at each school as selected by the principal. Following observations, I will randomly recruit a minimum of 2 teachers to interview from each PLC at all sites (minimum 18 interviews total). I cannot confirm any site until I have IRB approval. However, each site agrees to have me conduct research following the appropriate IRB approval: Lowell High School, Marlborough High School, and Worcester Public Schools.

10. RESOURCES AVAILABLE

Jack Schneider is the PI for this study. Professor Schneider is an Associate Professor of Curriculum and Instruction at The University of Massachusetts Lowell and will be reviewing and guiding all research decisions. *Jack Schneider, Ph.D., is a historian and policy analyst who studies the influence of politics, rhetoric, culture, and information in shaping attitudes and behaviors. His research examines how educators, policymakers, and the public develop particular views about what is true, what is effective, and what is important. Drawing on a diverse mix of methodological approaches, he has written about measurement and accountability, segregation and school choice, teacher preparation and pedagogy, and the relationship between research and practice. His current work, on how school quality is conceptualized and quantified, has been supported by the Spencer Foundation and the Massachusetts State Legislature. The author of four books, Schneider is a regular contributor to outlets like the Washington Post and the Atlantic, and co-hosts the education policy podcast Have You Heard. He is also the co-founder and Director of Research for the Massachusetts Consortium for Innovative Education Assessment (Quoted from UML webpage).*

SELECTED AWARDS AND HONORS

- Fellow (2020-Present), *Scholarship/Research - National Education Policy Center*
- Friend of Education Award (2021), *Massachusetts Teachers Association*
- Teaching Excellence Award (2020), *Teaching - University of Massachusetts Lowell*
- PROSE Award (2018), *Scholarship/Research - Association of American Publishers*
- Stanford Graduate Fellowship (2005), *Scholarship/Research - Stanford University*

SELECTED PUBLICATIONS

- **Schneider, J.**, Berkshire, J. (2020). *A Wolf at the Schoolhouse Door: The Dismantling of Public Education and the Future of School*. The New Press
- **Schneider, J.** (2017). *Beyond Test Scores: A Better Way to Measure School Quality*. Harvard University Press
- **Schneider, J.** (2014). *From the Ivory Tower to the Schoolhouse: How Scholarship Becomes Common Knowledge in Education*. Harvard Education Press
- **Schneider, J.** (2011). *Excellence For All: How a New Breed of Reformers Is Transforming America's Public Schools*. Vanderbilt University Press

SELECTED CONTRACTS, FELLOWSHIPS, GRANTS AND SPONSORED RESEARCH

- Massachusetts Consortium for Innovative Education Assessment (2019), *Grant - Chan Zuckerberg Initiative*
Schneider, J. (Co-Investigator)
- Using Data to Empower Communities (2020), *Grant - Massachusetts Teachers Association*
Schneider, J. (Principal)
- Beyond Test Scores (2019), *Grant - Center for Collaborative Education*
Schneider, J. (Principal)
- Historical Perspectives on School Reform (2019), *Grant - Chan Zuckerberg Initiative*
Schneider, J. (Principal)
- Lesson Study in Japan (2019), *Grant - Marion and Jasper Whiting Foundation*
Schneider, J. (Principal)
- Rethinking Data Use in Measuring Teacher Education Programs (2018), *Contract - Westfield State University*
Schneider, J. (Principal)
- Beyond Test Scores (2018), *Grant - Center for Collaborative Education*
Schneider, J. (Principal)

I, Maggie Moriarty, am the co-investigator in this study. I am a PhD candidate of Leadership in Education at The University of Massachusetts Lowell. I will be responsible for establishing contact with the 3 sites I am working with: Lowell High School, Marlborough High School, and TBD High School in Worcester Public School District. I will conduct all interviews, observations, and analyze all data. I have prepared the interview protocol to be reviewed by my dissertation committee. I am working with Professor Hilary Lustick who is serving as a member of my dissertation committee to create an observation protocol. My interview protocol and observation protocol will be reviewed by Professor Hilary Lustick, Professor Jim Nehring and Professor Jack Schneider who make up my entire dissertation committee. Professor Jim Nehring is leading the Phase III candidates in the UML PhD Educational Leadership program and will give regular feedback on my data analysis and reporting. I have completed all course work as

well as an approved Pilot Study to qualify me to conduct research at this scale. I will dedicate 6 days to observe PLCs at all three sites, 2 days at each school. I will conduct 18, 40-minute interviews totaling 720 minutes of interview time. Observations and interviews will take place between February and June of 2022. Coding each interview and observation will likely take between two and three months. I will meet with Professor Nehring and other Phase III PhD candidates 1-2 times formally each month to review my process. I will also meet informally with Professor Schneider on a regular basis throughout the length of this study. I will meet with Professor Lustick regularly to review my coding methods and reporting structure for this study. Professor Lustick is an Assistant Professor of Curriculum and Instruction at The University of Massachusetts Lowell who specializes in research methodology. All persons assisting with this research are adequately informed with all protocols, research procedures and their duties and functions.

I have purposely selected each site based on their current PLC progress and performance. I have currently contacted all sites and clearly communicated the purpose of the study and its procedures.

11. STUDY TIMELINES*

Following IRB approval, I will begin data collection between the months of February and June 2022 at all three sites. I already have the paperwork completed for each district to conduct research at the appropriate high school. As soon as I submit IRB approval, I will wait for the approval of each superintendent and in some cases possibly school committee approval.

Following observations of all 9 PLC teams, I will schedule Zoom interview times with 18 participants (6 from each school, 2 from each PLC observed) at their convenience. I will code and analyze data through the summer of 2022 and begin to report data in the fall or 2022. I plan to defend my dissertation findings in December 2022.

12. NUMBER OF SUBJECTS*

18 subjects (Teachers). Two teachers will be interviewed from each PLC team, 9 teams total. One school has been identified as highly developed PLC institution by Novak Consultants and the other two are newly developed PLC institutions. I am uncertain at this time how many teachers will be on each PLC team that I observe but on average, PLCs tend to be made up of 4-6 teachers.

13. PROCEDURES INVOLVED*

I will interview 18 volunteer participants from 9 different PLC teams at three different high schools to collect this data. The principal or assistant principal from each site will send an email to all PLC participants that will be observed, and I will be attached on the email. The principal is sending the e-mail for logistic purposes only. I will attach consent forms for the observation that have been reviewed and approved during this IRB submission. Each PLC has been randomly selected by the principal so that I may conduct 2-3 observations on the same school day. The PLCs that I observe will be teachers that meet on this same day. Participants will have 2 weeks to decide if they are willing to participate in this study. Once I have received consent from all participants, I will go to each PLC meeting and observe using an observation protocol that I have created in guidance with my dissertation committee. If teachers use an agenda, analyze student

work, analyze a lesson, or use any other types of documents, I will ask if I can have a copy of these documents for analysis. No student names will be identified during observation or on collected documents should student samples be observed. No student names will be identified during this study.

Once I conduct all observations, I will begin creating ID codes for all participant information to conceal identity. I will do that same for the interview process. All interviews and observations will be recorded using the Otter transcription application. Participants are aware they are being recorded from notification in the consent form. I will ask for verbal permission to record at the start of each interview. Following interviews and observations I will review transcriptions. I will code all data on my computer using a three-pronged approach to line-by-line coding. I have attached my interview protocol and observation protocol for review.

I will ask each participant 13 interview questions that should take approximately 40 minutes. My interview questions have been reviewed by my dissertation committee. I have constructed my interview questions based off principles from organizational learning theory. Following observations, I will have a list of teacher emails I can contact to recruit interview participants. I will share consent forms via email and ask for electronic signatures if they voluntarily choose to participate. I will email all teachers within the observed PLCs to request their participation in my interview, and I feel confident that at least two teachers will respond in agreement.

The 9 observations will be recorded in-person using the Otter transcription application. I have constructed an observation collection form based on concepts of organizational learning theory. Professor Lustick is helping me build this form that I will submit for review. The observations will not be video recorded. I will collect all consent forms prior to the observation to ensure that all individuals in the PLC have granted their consent for observation. I am observing 5-9 teachers in each PLC. No other individuals beyond teachers will be present in this meeting. I am observing what teachers discuss during their PLC and why. If teachers use agendas, student work, a lesson study, their school improvement plan, or any other documents during the observation I will ask if I can make copy to obtain for data analysis. No student names will be identified during observation or on collected documents should student samples be observed. No student names will be identified during this study. These documents are important because I am trying to understand what teachers talk about and why during their PLC time. Meeting notes, agenda items, etc. could reveal conflicting findings in what teachers say they are going to talk about as opposed to what they actually talk about. I will code all documents in the same process I will code my interviews. I will not be collecting any records from teachers. Any data gathered will be from the PLC not from individual teachers. For example, a collected agenda document might have meeting norms, specific items to discuss, a time break-down of topics, roles of the participants etc. I will collect these documents during observations which will take place between February and June of 2022. I will destroy any collected documents one year after the study is completed in 2024.

I will be conducting interviews after I complete all observations. This will allow teachers to familiarize themselves with me to increase the likelihood that they will participate in a 40-minute interview. In order to ensure my interview questions will address the main purpose of my study I will have Professor Jim Nehring and other Phase III UML PhD candidates in my program

provide feedback and revision suggestions for my study. I will submit interview questions at a later date for IRB Review. Estimated date for review is February of 2022.

14. RECRUITMENT METHODS*

Worcester Public School District has been commended for their achieved success with PLCs led by Dr. Magdalena Ganas. Katie Novak, of Novak Consultant Agency, a DESE approved professional development group, has connected me with Dr. Ganas. Worcester will serve as my highly developed PLC site awarded in their outstanding work aligning equitable and inclusive practices across their district through PLCs. Following IRB approval, Dr. Ganas will confirm what high school I will be working with in Worcester. Stacy Szczesiul, the Associate Dean of Online Education at The University of Massachusetts Lowell, has put me in contact with Dan Riley, the Principal of Marlborough High School to confirm my second site of research. Marlborough High School has implemented PLCs for many years and will serve as a well-developed PLC site for observation. Principal Riley has confirmed that I can conduct research at Marlborough High School following IRB approval. The final site of study is Lowell High School where I am currently employed as an ELA teacher. This is the first year Lowell has adopted PLCs and it will serve as my newly developed PLC site. Assistant Principal Dr. Jill Rothschild has confirmed that I can conduct research at Lowell High School following IRB approval.

I will observe 3 PLCs at each school site. I have discussed this number with each site coordinator that agrees it is a feasible number to attain in observation in the 5-month span of this study. Each PLC I observe will be selected randomly by the principal or assistant principal based on the day they are able to have me at their school to observe. The principal or assistant principal are selecting the observed PLCs solely for logistic purposes so that I may observe PLCs that meet on the same day. This is to reduce the number of days I will have to be absent from my full-time job. I will provide consent forms to all teachers within PLCs prior to observation. Teachers may elect to not participate in the study and will be aware of the purpose of my observation as well as any possible risks as a result of participation. Again, there will be no specific criteria in selecting the observed PLCs other than recruiting 3 PLCs that meet on the same day.

Each PLC varies in number between 5-9 teacher participants that I will have access to for interviewing purposes. For this study, I will interview 2 teachers from each PLC. Each site coordinator agrees this is feasible. Due to the overwhelming strain Covid-19 has placed on teachers, I will not ask more than 2 teachers from each PLC to participate in the interview process. The principal or assistant principal at each site will send out a mass-email including all PLC members I have observed asking them to participate in a voluntary 40-minute interview with myself. I will be attached on the email, and I will include the IRB interview consent form that I have submitted for review. All teachers will have the option to say yes or no to the interview without any form of penalty or benefit. The IRB interview consent form will make clear the purpose of the interview questions as well as any risk of potential harm for the interviewee. If more than 2 teachers agree to participate in the interview process, I will not turn away any candidates. If less than 2 teachers agree to participate in the interview process, I will send a follow-up email to individual teachers to hopefully gain consent. I feel this number is feasible due to past experience in my pilot study where I was able to attain 4 voluntary interview

participants from a pool of 7 possible participants from one school for an interview of the same length of time.

Individuals do not be screened for eligibility as all participants are licensed teachers that qualify to serve on a PLC. I will record their identity but immediately provide an ID code for each observed participant in order to conceal their identity. I will immediately remove names once I develop an ID code for all observed participants. I will destroy all identifiers one year after the study and I will keep all information in a password protected database in the university's OneDrive. There are no teachers that could be ineligible for this study. If participants decline to participate in the observation section of this study the principal or assistant principal will allow them to miss the meeting on the day of observation without any risk of penalty to the individual. If more than one teacher elects not to participate in one PLC, then the principal or assistant principal will ask another PLC to participate.

All recruitment for this study will be done via email. Teachers will not be paid for participation in the study.

15. CONSENT PROCESS*

All members of the observed PLC will receive a consent form via email two weeks prior to the observation to have sufficient time to consider participating. Following observations, I will begin the recruitment for interviews. The principal or assistant principal from each site will help in communication for the interview process to help me attain all participant emails for communication. Interview participants will receive consent forms via email prior to the zoom interview sessions. All consent forms will be signed electronically online for both observations and interviews. The consent form does not need to be translated. All study staff are familiar with and will follow [HRP-802 INVESTIGATOR GUIDANCE: Informed Consent](#) No student names will be identified during observation or on collected documents should student samples be observed. No student names will be identified during this study.

16. PROCESS TO DOCUMENT CONSENT IN WRITING

I will not document consent in writing. My research presents no more than minimal risk.

17. WITHDRAWAL OF SUBJECTS WITHOUT THEIR CONSENT*

N/A

18. SHARING OF RESEARCH RESULTS WITH SUBJECTS*

N/A

19. RISKS TO SUBJECTS*

This study involves the risk of being uncomfortable while being observed and the risk for disclosure. There is also the risk that a teacher may feel they have to participate in the observations since the principal is the individual sending the email. Teachers will be reminded that their participation or non-participation will have no negative effects on their employment

20. POTENTIAL DIRECT BENEFITS TO SUBJECTS*

N/A

21. DATA AND SPECIMEN ANALYSIS AND MANAGEMENT*

In consideration of my role as a singular researcher in comparison to larger funded studies composed of multiple researchers, I will extensively review my transcripts. In collecting any protocols or structures used in the meeting I will compare how each PLC team facilitates their meeting time. Utilizing the Otter transcription app, I can record the audio of interviews and analyze body language with field notes and memos as I observe. I will continually and regularly examine my coding system utilizing NVIVO to refresh the origins of my conclusions over the span of the project. I will ensure that all participants are given informed consent and promise full anonymity of the transcriptions, observations, documents and location of the study. In the first phase of research, I seek to obtain a deeper understanding of how teachers understand PLCs and how they perceive their individual role within their PLC team. Following the collection of interview data, I will create a table to differentiate the years of teaching experience each participant holds, total time spent with their current PLC, their focused content area, and any additional roles they play in the institution outside of their teaching classroom that may influence their participation or a mental model they have developed prior to their involvement in PLC reform. Through semi-structured interviews, I will illustrate how these teachers understand PLCs and how they contribute or undermine the performance of their PLC team as a whole through dialogue. In utilizing a qualitative method of constant comparison, the collection of multiple teacher interviews and observations will allow me to note similarities or differences in the perception or role individual teachers adopt in PLC implementation.

All data will be collected and stored on the UML OneDrive which is vetted for security in a password protected computer and will only be accessed by myself. The high school and all teachers will be provided with pseudonyms during reporting. Data will be stored on the UML OneDrive. The system has been vetted for security and requires a two-tiered password entry for access.

22. PROVISIONS TO MONITOR THE DATA TO ENSURE THE SAFETY OF SUBJECTS*

N/A

23. DATA AND SPECIMEN BANKING

N/A

24. CONFIDENTIALITY

The data will exist in both hard copy documents utilized by teachers as well as electronic transcripts of interviews. I will use pseudonyms during the coding process to remove all names or indicators of identity. This data will be stored on the UML OneDrive which is vetted for security for no more than three years following the completion of the study. I will use my own portable laptop to collect data that is secured with a passcode to limit all access. Data will be stored on the UML OneDrive. The system has been vetted for security and requires a two-tiered password entry for access. No student names will be identified during observation or on collected documents should student samples be observed.

25. PROVISIONS TO PROTECT THE PRIVACY INTERESTS OF SUBJECTS

N/A

26. COMPENSATION FOR RESEARCH-RELATED INJURY

N/A

27. ECONOMIC BURDEN TO SUBJECTS

N/A

28. COMMUNITY-BASED PARTICIPATORY RESEARCH*

N/A.

29. MULTI-SITE RESEARCH*

N/A

30. RESEARCH CONDUCTED IN A FOREIGN COUNTRY

N/A

31. DRUGS OR DEVICES

N/A

APPLICATION FOR RESEARCH REVIEW LOWELL PUBLIC SCHOOLS DISTRICT INSTRUCTIONAL REVIEW BOARD 2019-2020	
NAME:	Maggie Moriarty
LOCATION OF EMPLOYMENT	Lowell High School
APPROVAL FROM IRB (ORGANIZATION OR EDUCATIONAL INSTITUTION) *Please list name and attach approval letter*	University of Massachusetts Lowell IRB Approval Emily Sousa IRB Manager Office of Research and Integrity
RESEARCH INFORMATION	
Description of Study:	Scholars have illustrated that effective Professional Learning Communities (PLCs) have increased student achievement and advanced teacher pedagogy (Talbert,

	<p>2010; Stol, Bolam, McMahon, Wallace, & Thomas, 2006; Brown, Horn & King, 2018; DuFour & Reeves, 2018; Rosenholtz, 1989). Yet less is known about the mechanisms by which PLCs transform teacher pedagogical practice (Nelson, 2009). Hord (1997) noted dialogue as the most important mechanism teachers can utilize within learning organizations “in which staff conduct conversations about students and teaching and learning” (p 20). Dialogue has been found as a “central mediating practice” to help teachers adjust instruction beyond surface level changes (Marsh, Bertrand & Huguet, 2015). This study aims to further explore the process of teacher dialogue within PLCs to understand factors that inhibit, or support, the professional development of teachers.</p> <p>In order to understand the purpose, development, and practice of teacher dialogue within PLCs, I will examine how teachers facilitate dialogue during collaboration in three secondary intuitions. This study will pursue two research questions:</p> <ol style="list-style-type: none"> 1. What is teacher dialogue within Professional Learning Communities focused on and why? 2. How does the nature of teacher dialogue in Professional Learning Communities inhibit or support changes in instructional practice?
Participants in the project:	
Unit of Study: (Teachers, students, etc.)	Teachers
Estimated amount of Participants:	3 PLC groups- participants may vary depending on the number of teachers in each PLC. I would estimate 18 teachers at most.
Place an X in the box next to any of the following special populations involved in this study, if applicable.	<div style="margin-left: 40px;"> <input type="checkbox"/> Minors <input type="checkbox"/> Students with disabilities <input type="checkbox"/> Other vulnerable populations- please identify </div> <p style="color: red; text-align: center;">*If working with students, please see #5</p>

Age ranges:	Teachers 21+
Gender of Participants (check all that apply):	Male (<input checked="" type="checkbox"/>) Female (<input type="checkbox"/>)
a.	
Research Methodology:	
How will this research be beneficial in advancing knowledge in the district?	<p>Knowledge obtained from this study could further improve the fidelity of our teacher professional learning communities.</p> <p>Findings could produce tools or knowledge to help structure teacher dialogue to increase focus and understanding on student learning and teacher pedagogy.</p>
Will this research create a strain on the district's staff and/or resources? Please describe.	<p>No. My study is mainly observations. I will ask 2 teachers from each PLC (6 total) to voluntarily participate in an interview to further detail their experience on a PLC. These interviews will happen at the convenience of the teacher and will not take place during class time. This study will not use any resources from the district.</p>
Describe the procedures involved in the collection or review of the data in sufficient detail so that the IRB can	<p>Once I have received consent from all participants, I will go to each PLC meeting and observe using an observation protocol that I have created in guidance with my dissertation committee. No student names will be identified during observation or on collected documents should student samples be observed. No student names will be identified</p>

<p>evaluate safety and risks to human participants.</p> <p>If necessary, please review the attached NIH “Protecting Human Research Participants” PDF for additional info.</p>	<p>during this study. Once I conduct all observations, I will begin creating ID codes for all participant information to conceal identity. I will do that same for the interview process. All interviews and observations will be recorded using the Otter transcription application. Participants are aware they are being recorded from notification in the consent form. I will ask for verbal permission to record at the start of each interview. Following interviews and observations I will review transcriptions. I will code all data on my computer using a three-pronged approach to line-by-line coding. I will ask each participant 13 interview questions that should take approximately 40 minutes. My interview questions have been reviewed by my dissertation committee. I have constructed my interview questions based off principles from organizational learning theory. Following observations, I will have a list of teacher emails I can contact to recruit interview participants. I will share consent forms via email and ask for electronic signatures if they voluntarily choose to participate. If teachers use agendas, student work, a lesson study, their school improvement plan, or any other documents during the observation I will ask if I can make copy to obtain for data analysis. No student names will be identified during observation or on collected documents should student samples be observed. No student names will be identified during this study. These documents are important because I am trying to understand what teachers talk about and why during their PLC time. Meeting notes, agenda items, etc. could reveal conflicting findings in what teachers say they are going to talk about as opposed to what they actually talk about. I will code all documents in the same process I will code my interviews. I will not be collecting any records from teachers. Any data gathered will be from the PLC not from individual teachers. For example, a collected agenda document might have meeting norms, specific items to discuss, a time break-down of topics, roles of the participants etc. I will collect these documents during observations which will take place between February and June of 2022. I will destroy any collected documents one year after the study is completed in 2024.</p> <p>All members of the observed PLC will receive a consent form via email two weeks prior to the observation to have sufficient time to consider participating. Following observations, I will begin the recruitment for interviews. The principal or assistant principal from each site will help in</p>
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	<p>communication for the interview process to help me attain all participant emails for communication. Interview participants will receive consent forms via email prior to the zoom interview sessions. All consent forms will be signed electronically online for both observations and interviews. The consent form does not need to be translated. All study staff are familiar with and will follow HRP-802 INVESTIGATOR GUIDANCE: Informed Consent No student names will be identified during observation or on collected documents should student samples be observed. No student names will be identified during this study.</p> <p>This study involves the risk of being uncomfortable while being observed and the risk for disclosure. There is also the risk that a teacher may feel they have to participate in the observations since the principal is the individual sending the email. Teachers will be reminded that their participation or non-participation will have no negative effects on their employment</p>
<p>What form of data collection will this research take? Check all that apply:</p>	<p> <input type="checkbox"/> Survey <input type="checkbox"/> Experiment <input type="checkbox"/> Interview (Group) <input checked="" type="checkbox"/> Interview (Individual) <input type="checkbox"/> Existing Records <input checked="" type="checkbox"/> Observation <input type="checkbox"/> Other (Explain): _____ </p> <p>*If using a survey, please see #8</p>
<p>Anonymity / Confidentiality. If the responses are to be anonymous, explain the procedure you will follow so</p>	<p>Is your study anonymous? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no</p> <p>If not anonymous, is your study confidential? <input type="checkbox"/> yes <input type="checkbox"/> no</p> <p>1) The data will exist in both hard copy documents utilized by teachers as well as electronic transcripts of interviews. I will use pseudonyms during the coding process to remove all names or indicators of identity. This data will be stored on the</p>

<p>that participants' responses are in fact anonymous. If the responses are NOT anonymous, explain the procedure you will follow so that the responses will held in confidence.</p>	<p>UML OneDrive which is vetted for security for no more than three years following the completion of the study. I will use my own portable laptop to collect data that is secured with a passcode to limit all access. Data will be stored on the UML OneDrive. The system has been vetted for security and requires a two-tiered password entry for access. No student names will be identified during observation or on collected documents should student samples be observed. No student names will be identified during this study.</p>
<p>Data Safety and Reporting:</p>	<p>[Describe how data collected from participants will be stored (including how long data will be maintained) and in what ways will the data be shared (publications, presentations). Be specific as to the location and security of data storage, and who will have access to it. Describe when and how data will be destroyed, if that applies.]</p> <p>I will use my own portable laptop to collect data that is secured with a passcode to limit all access. Data will be stored on the UML OneDrive. The system has been vetted for security and requires a two-tiered password entry for access. All site schools in this study will also be given a pseudonym. I will present findings in the form of a dissertation to be presented to my selected committee from The University of Massachusetts Lowell. The committee consists of 3 Associate Professors. The dissertation will not be published. I, Jack Schneider, Jim Nehring, and Hilary Lustik will have access to this data but they will only review identifying codes and pseudonyms. All coding data, identifiers, and transcripts, and collected documents will be destroyed 3 years after the study is completed.</p>
<p>Level of Review:</p>	
<p>Researcher's classification of the project. (See Guidelines): (The IRB will make the final determination.)</p>	<p>() No Risk (X) Minimal Risk () Risk</p> <p>[Is there any potential harm for research participants or the district?]</p>
<p>a. If MINIMAL RISK or RISK, identify the potential risks:</p>	<p>[This description must be detailed and complete, and the risks identified should match your informed consent description to participants. Your informed consent form should be attached as an appendix as well.]</p>

	<p>This study involves the risk of being uncomfortable while being observed and the risk for disclosure. There is also the risk that a teacher may feel they have to participate in the observations. Teachers will be reminded that their participation or non-participation will have no negative effects on their employment</p>
<p>1. Informed Consent Form. If any risks are identified, you must submit an Informed Consent Form for approval.</p> <p>*Parental Consent Forms MUST be used if minors are included in study, in predominant language of parent.*</p>	<p>() See attached (either at the end of this form, or as a separate file attachment on the electronic submission website)</p> <p>() Not applicable</p> <p>[On very rare occasions, federal regulations provide for informed consent to be waived. If you wish this, give your arguments for the waiver, supporting your argument with federal guidelines.]</p>
<p>2. Will deception (purposefully misleading participants as to the purpose of the study) be used?</p> <p>If yes:</p> <p>a. Describe the deception.</p> <p>b. Justify the use of deception.</p> <p>c. Explain how participants will be debriefed as to the real purpose of the study.</p> <p>d. Attach a copy of the debriefing statement or script.</p>	<p>YES () NO (X)</p> <p>[If this is a deception study, you must explain what the deception is, why the use of deception is necessary, why it is justified (risk/benefit analysis), and how participants will be informed of the real purpose. Attach a copy of the written debriefing statement (or script if you will explain orally) at the end of this application or as a separate file upload on the electronic submission website.]</p>
<p>3. List all other institutions co-operating in the project. Attach <u>written</u> permission from each to your application.</p>	

4. Attach a copy of the survey or interview questions associated with your project.	<input checked="" type="checkbox"/> (X) See attached (Appendix #) <input type="checkbox"/> () Not applicable
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General Information

Department: ELA

Prepared by: Maggie Moriarty

Date: 02-05-2022

Brief description of request:

I am requesting to conduct research focused on professional learning communities at your institution. In order to understand the purpose, development, and practice of teacher dialogue within PLCs, I will examine how teachers facilitate dialogue during collaboration in three secondary intuitions. This study will pursue two research questions:

1. What is teacher dialogue within Professional Learning Communities focused on and why?
2. How does the nature of teacher dialogue in Professional Learning Communities inhibit or support changes in instructional practice?

I am requesting to observe 3 PLC teams at Lowell High School and interview two teachers on each of these teams. This will not disrupt the school day; no students will be involved, and extensive steps have been taken to ensure confidentiality. I have also included all research materials and IRB approval forms.

Supervisor: _____

Signature: _____

Cabinet Member: _____

Signature: _____

Finance Review (if needed): ☐ Yes ☐ No

Comments: _____

Finance Signature: _____

IT Review (if needed): ☐ Yes ☐ No

Comments:

IT Signature: _____

For questions or concerns please call 978-674-4324 or email us at mpalazzo@lowell.k12.ma.us

Professional Learning Community Teacher Participant Interview Protocol

1. Can you briefly describe how many years you have been teaching; including the various roles, responsibilities and grade levels you have worked with during your time in this profession?
2. Can you describe the process in how your school adopted PLC reform and how it was initially rolled out, as either a voluntary or mandated initiative?
3. Does your principal play an active role in PLCs and have you seen any shift in the power dynamics of your school since PLCs have been adopted?
4. Does your school have a PLC school-wide vision or goal, or do PLCs function autonomously based on the make-up of the group or individual student needs the team may face?
5. Can you describe how your current PLC typically functions; for example, how many times do you meet per week, how are your meetings run, who decides what the focus of discussion will be, etc.?
6. What topic takes up the bulk of your time during PLC? Can you explain why you think this is so?
7. Can you think of an example of a conversation that has taken place during your PLC that has led to a change in your teaching practice?
8. Can you give greater detail on your current experience working with a team of teachers making instructional decisions as opposed to resolving concerns and planning in isolation?
9. How often do you share student work or analyze a lesson plan?

10. Does your PLC use any structures to control dialogue such as protocols? Can you then elaborate on your experience in PLC meetings when dialogue is controlled with a protocol versus a conversation that develops organically?
11. How does your PLC assess its growth? In other words, how do you know your collaborative dialogue is meaningful and positively influencing your development as a teacher?
12. How often do you meet with other PLCs in your school or district to discuss your progress, goals or implemented instructional strategies?
13. Do PLC conversations ever lead to hands-on learning opportunities such as observing your colleagues teaching? If so, are you comfortable being observed by your colleagues to reflect on your own approach to instruction?
14. If you are experiencing a student problem; instructional, behavioral, emotional and so on, who do you tend to talk to in your school and why?